

## Abstract

The present invention relates to an apparatus and method for diagnosing faults in hot strip finishing rolling, which  
5 diagnoses thickness faults in hot strip finishing rolling, using preset data and real-time data on rolling and control conditions, equation models representing control and physical phenomena and a database constructed based on operation experiences.

10 The present invention comprises: a Supervisory Control Computer (SCC); an actually measured data collection unit; an exit side thickness gauge loaded-on determination unit; a part identification unit; an on-gauge ratio calculation unit; a primary fault determination unit; a secondary fault  
15 determination unit; and a confidence rate evaluation unit.